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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,882	10/12/2004	Chen-Hsiung Yang	TMIP0001USA	5881
27765	7590	05/16/2008	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			NGUYEN, HUNG	
P.O. BOX 506				
MERRIFIELD, VA 22116				
			ART UNIT	PAPER NUMBER
			2851	
			NOTIFICATION DATE	DELIVERY MODE
			05/16/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
mis.ap.uspto@naipo.com.tw

Office Action Summary	Application No. 10/711,882	Applicant(s) YANG, CHEN-HSIUNG	
	Examiner Hung Henry V. Nguyen	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 12-19 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/12/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/1/08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-9, 12-15, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art of Figures 2-3 in view of Van Elp et al (U.S. Pat. 6,864,957).

With respect to claims 1, 3-4, 12, 14-15, AAPA of figures 1-3, discloses a wafer carrier for carrying a wafer (20) comprising: a transparent base (28); a bonding layer positioned on a top surface of the wafer carrier for bonding the wafer (20) and the transparent base together; and an electrostatic chuck (30) for attracting the wafer carrier.

As to claims 2, 13, AAPA (figure 2) further teaches that the base (28) has dimension similar to that of the wafer (20).

As to claims 7-8, and 17-18, it is disclosed that the wafer is transferred and undergoes at least a semiconductor process and a double-sided process and the wafer has a plurality of alignment marks (see figure 3 and Para [8] of the specification).

Thus, AAPA of figures 2-3 discloses substantially all of the limitations of the instant claims. AAPA lacks to show a conducting layer positioned on a bottom surface of the wafer carrier. However, this feature is well known per se. For example, Van Elp discloses an electrostatic chuck having a transparent conducting layer (321) positioned on a bottom surface of the wafer carrier (330) for the purpose of quickly removing the wafer from the electrostatic chuck (see col.4, lines 18-23; col.4, lines 62-67). In view of such teachings, it would have been obvious to combine the teachings of AAPA of figures 2-3 and Van Elp to obtain the invention as specified in the mentioned claims of the present application. It would have been obvious to a skilled artisan at the time the invention was made to position the conducting layer (321) as taught by Van Elp on a bottom surface of the base (28) of AAPA so that the wafer can be quickly removed from electrostatic chuck thereby improving the throughput of the semiconductor process.

4. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art of Figures 2-3 in view of Van Elp et al (U.S. Pat. 6,864,957) and further in view of Strasbaugh et al (U.S. 2003/0134578).

As to claims 6 and 16, AAPA of figures 2-3 as modified by Van Elp, discloses substantially all of the limitations of the instant claims as discussed. AAPA does not expressly

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disclose the bonding layer being selected from the group consisting of double-sided tape, ultra violet tape, thermal sensitive tape, thermal sensitive tape, photo resist, or wax. Strasbaugh et al disclose bonding layer of double sided tape (see claim 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the bonding layer of double sided-tape as taught by Strasbaugh for at least the purpose of providing a secure support of the wafer.

Allowable Subject Matter

5. Claims 10-11, 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, either alone or in combination, neither discloses nor makes obvious a wafer carrier comprising among other features, a non-transparent conducting layer having at least an expose region corresponding to the alignment mark, as recited in the instant claims of the present application.

Response to Amendment/Argument

7. Applicant's amendment filed April 1, 2008 has been entered. Claims 1, 12 have been amended. Claim 5 has been cancelled. Applicant's arguments with respect to prior art rejections have been carefully reviewed but have been traversed in view of new grounds of rejections as set forth above.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V. Nguyen whose telephone number is 571-272-2124. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Hung Henry Nguyen/
Primary Examiner
Art Unit 2851**

hvn
5/10/08